Department of Chemistry

Report on Invited Talk

Name of the Activity: Invited talk

Title of the event: "Application of Advanced Analytical Techniques for Food and Health Research"

Day & Date: 17-10-2025 Friday

Time: 2.20 am -3.30 pm

Mode: online

Link: https://meet.google.com/otf-yjie-ckz

Venue: Boardroom

Resource Person: Dr. Sidda Basave Gowda

No. of Participants: 32

Brief summary of the activity:

Introduction:

The **Department of Chemistry under the Chemistry Forum** organized an enlightening **Invited Talk** delivered by **Dr. Sidda Basave Gowda** on the topic *"Application of Advanced Analytical Techniques for Food and Health Research."* The session aimed to introduce students and faculty to the role of modern analytical instruments in biochemical and health-related studies. It also provided valuable insights into the scope of food science research, metabolic health improvement, and global research opportunities. This talk was organized as part of the department's continuous effort to promote scientific awareness and motivate students toward higher education and international research exposure. This talk was also organized as part of the department's initiative to promote postgraduate admissions in the institution.

About the Speaker:

Dr. Sidda Basave Gowda is a distinguished researcher with extensive experience in **biochemistry, lipidomics, and analytical chemistry**. He has contributed significantly to research in metabolic diseases, food chemistry, and therapeutic lipid studies. He is currently associated with **Hokkaido University, Japan**, where he works on advanced analytical approaches to understand biomolecular mechanisms related to food and health. His expertise

and research accomplishments have made him a valuable contributor to the field of biochemical sciences.

Summary of the Talk:

Dr. Sidda Basave Gowda began the session by emphasizing the **importance of advanced analytical techniques** such as **Mass Spectrometry, Mass-Pen Spectrometry, and Chromatographic methods** in modern food and health research. He explained how these techniques help in identifying, characterizing, and quantifying biomolecules involved in various diseases.

In his insightful presentation, **Dr. Sidda Basave Gowda** elaborated on the **causes of fatty liver**, emphasizing factors such as poor diet, sedentary lifestyle, obesity, and metabolic imbalance. He discussed the **role of lipids in liver health**, explaining the difference between harmful and beneficial fats, and stressed the importance of maintaining a balanced lipid profile. The speaker also highlighted how **plant-based lipids**, including those from seeds, nuts, and oils like flaxseed and olive oil, contribute positively to lipid regulation and liver function. Dr. Gowda also shared insights into the **application of Mass-Pen Spectrometry in cancer research**, particularly in the early detection and molecular diagnosis of tumors.

Furthermore, he briefed the audience about **research and scholarship opportunities at Hokkaido University, Japan**, outlining various international fellowship programs and encouraging students to pursue higher studies and collaborative research in global institutes.

The talk covered key aspects such as:

- Analytical tools and their applications in biochemical and food research
- Role of FAHFA lipids in fatty liver treatment
- Use of Mass-Pen Spectrometry in cancer detection and therapy
- Research and funding opportunities in Japan

Dr. Gowda's presentation effectively bridged the connection between **analytical chemistry, human health, and global research opportunities**.

Interaction Session:

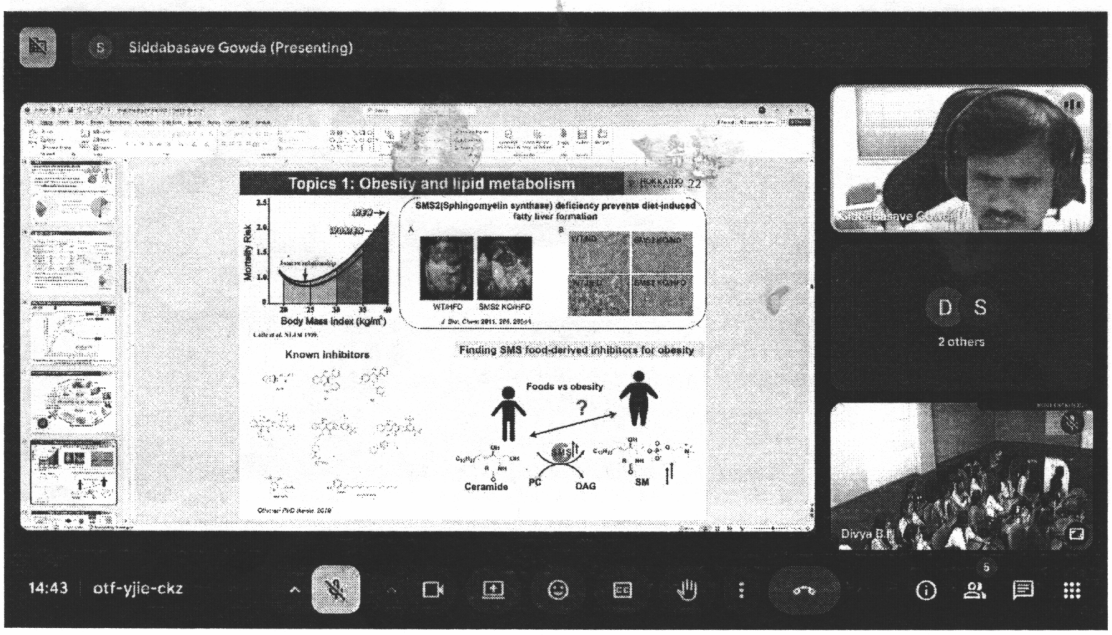
The talk was followed by an engaging **question-and-answer session**, where students interacted enthusiastically with the speaker. Questions were raised about the **reversibility of fatty liver**, **influence of plant-based oils**, **lipid profiling**, and **preventive dietary measures**. The session provided students with a deeper understanding of the connection between chemistry, health, and human metabolism.

Conclusion:

The invited talk offered **valuable insights into the biochemical mechanisms** of fatty liver and lipid regulation. It inspired participants to approach health-related issues through the lens of chemistry and scientific reasoning. The Department of Chemistry expressed its sincere gratitude to **Dr. Sidda Basave Gowda** for his informative and inspiring presentation, which enriched the academic environment.

Acknowledgements:

The department extends heartfelt thanks to the **organizing committee, faculty members, and students** for their active participation and cooperation in making the event a success.



Organising secretary

Divya. B. N
Head of the Department

HEAD OF THE DEPARTMENT
OF CHEMISTRY
Maharani Lakshmi Ammanni College
For Women (Autonomous)

Nanda Kumari
Principal

Principal
Maharani Lakshmi Ammanni College
for Women, Autonomous
Science Post, Bangalore - 560 012.

Maharani Lakshmi Ammanni College for Women Autonomous

Affiliated to Bengaluru City University
Accredited by NAAC (IV Cycle) with "A" Grade,
Recognised by UGC under Section 2(f) and 12(b) of the UGC Act 1956
Conferred the Status of 'College with Potential for Excellence' by UGC

Excellence in Education
Since 1972

CHEMISTRY FORUM

DEPARTMENT OF CHEMISTRY

Organizes International webinar on 17/10/2025@2pm

"Applications of Advanced Analytical Techniques for Food and Health Research"

ATTENDENTCE SHEET(B.Sc-III years)

SL. NO.	NAME	Signature
1	AISHWARYA REDDY R	Aish.R
2	AKSHAYA S	S. Akshaya
3	ALUGODU SRINGESWARA AKHILA	Akhila
4	AMULYA M S	Amulya.M.S
5	ANUSHREE J L	
6	BHAVANA J	Bhavana J
7	CHETANA K G	Chethana.K.G
8	ILAKKIYA S	Ilakkiya.S
9	INCHARA D	
10	J POOJITHA	
11	K KAVYA	Kavya
12	KAVANA N R	Kavi.R
13	KUSUMA T L	Kusuma.T.L
14	LASYA L	
15	MEGHANA N	
16	MONIKA M	Monika.M
17	N VARSHA	
18	NETHRA G	Nethra.G
19	NISARGA N	Nisarga.N
20	NISHA R	Nisha.R
21	NITHYA SHREE K B	Nithyashree.K.B
22	PRAKRUTHI R	Prakruthi.R
23	PREETHI S	Preethi.S
24	RANJITHA T E	Ranjitha

25	RUCHITHA M GOWDA	
26	SANDHYA V	
27	SHRAVANI I R	
28	SHYLAJA N	Shylaja.N
29	SOWMYA S B	Sowmya S.B
30	SUJANA S	Sujana.S
31	SUNITHA G	
32	TANUSHREE J	Tanushree.J
33	TASMIYA NAZHATH	
34	TUSHVITHA D	
35	UTHKRUTHI M	
36	V MADHUMITHA	V.Madhumitha.
37	VARALAKSHMI P	
38	Apoorva C	C.A
39	Kumudha .J	
40	Manjuladevi N	
41	Pragathi	

Divya. B. N

HEAD OF THE DEPARTMENT
OF CHEMISTRY
Maharani Lakshmi Ammanni College
For Women (Autonomous)

FEEDBACK

Name	Class	Register Number	How would you rate Resource Person knowledge in the subject?	Rate your experience regarding the International Webinar.	Was the topic of the international webinar useful to your area of study?	Any Suggestions
Bhavana J	3rd year Bsc	U18EE23S0248	5	2	Yes	Nothing.
Chethana KG	3rd bsc	U18EE23S0218	4	2	Yes	Nice webinar section and it helps to who will go for abroad and all it helps
C Apoorva	Bsc final year	U18EE23S0194	5	2	Yes	It was good (No suggestion)
Akshaya S	BSC 3RD YEAR	U18EE23S0228	5	1	Yes	Nothing
Amulya MS	3rd year	U18EE23SO246	5	2	Yes	Good Webinar
NISARGA N	3year 5th sem	U18EE23S0286	3	1	Yes	Nothing
Tushvitha D	Bsc 5th sem	U18EE23S0013	5	2	Yes	Give them some more time to interact
Ilakkiya.S	B.Sc 5th sem	U18EE23S0045	5	2	Yes	"The talk provided valuable insights into recent advances and applications in chemistry."
Sujana S	B. Sc 5th sem	U18EE23S0041	5	2	Yes	The talk on lipids gave a clear understanding of their structure and biological importance
Akhila A S	Bsc	U18EE23S0227	5	2	Yes	No
Monika m	Bsc 3rd year 5th sem	U18EE23S0224	5	2	Yes	Session Want to be some more time
Kumudha . J	3 rd year bsc	U18EE23S0310	5	2	Yes	No
Aishwarya Reddy R	3rd year BSc	U18EE23S0135	4	2	Yes	No
Preethi.S	Bsc biotechnology and	U18EE23S0124	4	2	Yes	Nothing
Tanushree.J	3 nd year BSC (Physics	U18EE23S0193	5	2	No	No
V Madhumitha	BSc 3 rd year	U18EE23S0214	4	2	Yes	No
Varalakshmi P	B.Sc (3rd year)	U18EE23S0309	5	2	Yes	No suggestion
Ranjitha.T.E	Bsc 5th sem	U18EE23S0195	5	2	Yes	Nothing
Kavana NR	3rd year Bsc	U1823S0274	5	2	Yes	..
Nithya Shree.K.B	Bsc 3rd year	U18EE23S0131	5	2	Yes	Nothing

Sinuya. B. N

HEAD OF THE DEPARTMENT
OF CHEMISTRY
Maharani Lakshmi Ammanni College
For Women (Autonomous)